REMARKS

The claims were objected to under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirements. The specific objections are that "not only is there no word 'after' in the entire specification, it is not clear where in the specification 'interchangeable optical and electrical programming' is disclosed. In addition, if there was a teaching of 'interchangeable optical and electrical programming,' it is unclear how this would suggest that optical programming occurs after electrical programming." See office action at page 3.

In order to satisfy the written description requirement, the disclosure as originally filed does not have to provide support for the claimed subject matter at issue in the same words used in the claims. *See Fujikawa v. Wattanasin,* 93 F.3d 1559, 1570, 39 U.S.P.Q. 2d 1895, 1904 (Fed. Cir. 1996). Nonetheless, the disclosure must convey with reasonable clarity to one skilled in the art that the inventor is in possession of the invention. *Vas-Cath, Inc. v. Mahurkar,* 935 F.2d 1555, 1563-4, 19 U.S.P.Q. 2d 1111, 1116-1117 (Fed. Cir. 1991). One skilled in the art, reading the original disclosure, must reasonably discern the limitation at issue in the claims. *Waldemar Link GmbH and Co. v. Osteonics Corp.,* 32 F.3d 556, 558, 31 U.S.P.Q. 2d 1855, 1857 (Fed. Cir. 1994).

Thus, the requirement that the word "after" appear in the specification applies an inappropriate test. Similarly, the reference to "interchangeable optical and electrical programming" is apparently a reference to applicant's remarks, but no such language is set forth in the claims.

The claims clearly teach optically programming after electrically programming. The specification includes the following language:

> However, transforming from the amorphous to the crystalline state may advantageously use electrical programming in some embodiments. Light programming may be used when going from the crystalline to the amorphous state in one embodiment of the present invention.

See the specification at page 8, lines 7-11. The import of these statements is that, in one embodiment, one transforms from the amorphous to the crystalline state using electrical programming and light programming is used to go back from the crystalline state to the amorphous state. In any reprogrammable phase change memory, transitions must occur from amorphous to crystalline and crystalline to amorphous, back and forth many times. Thus, necessarily, one skilled

in the art would understand that, in some instances within the normal usage of the memory, there would be a transition from amorphous to crystalline states and then back from the crystalline state to the amorphous state. Further, one skilled in the art would understand from the above passage that this would involve, in one embodiment, electrical programming followed by light programming.

As set forth in the case law cited above, all that is necessary is that the disclosure must convey with reasonable clarity that the inventor is in the possession of the information. Anyone skilled in the art would appreciate that, necessarily, in the normal operation of the device, a cell that transitioned from amorphous to crystalline would transition from crystalline back to amorphous states and that the disclosure clearly suggests doing the first stage electrically and the second stage optically. Therefore, despite the fact that the word "after" is not used in the cited passage, the concept of optical after electrical programming is clearly set forth.

Therefore, reconsideration is requested.

Respectfully submitted,

Date: January 25, 2007

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